/**Modular** Labeling Systems
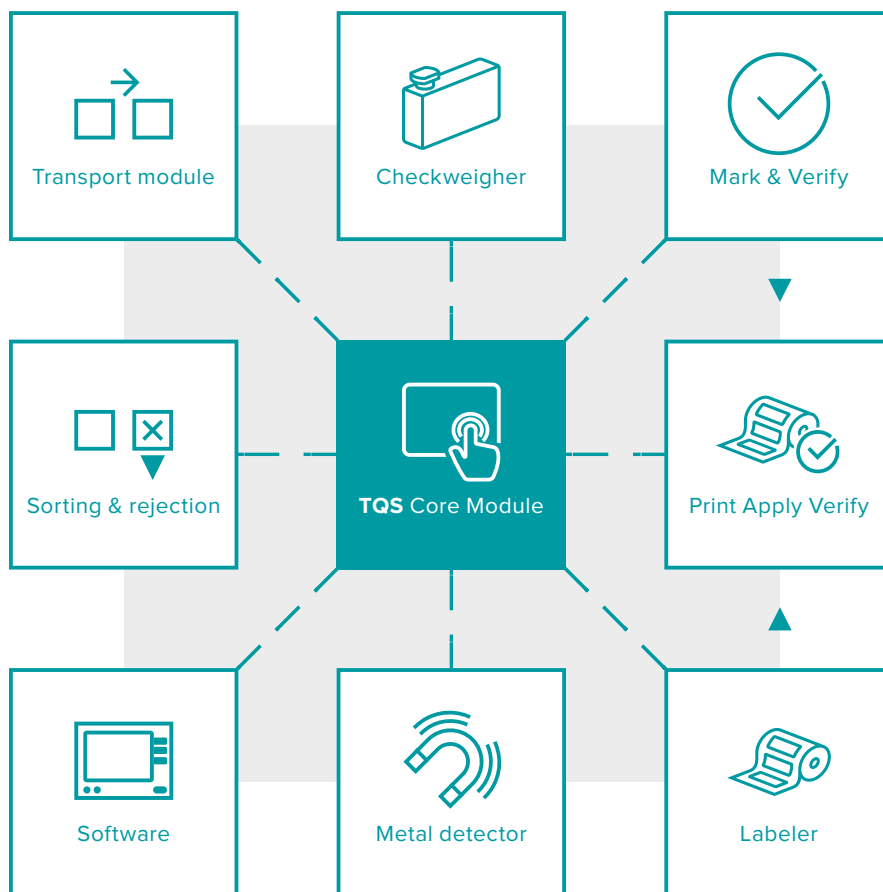
Products must be labeled perfectly. Whether FMCG producers have to meet the high standards of retailers or pharmaceutical companies must comply with serialization regulations: what they need is a reliable labeling solution. The range goes from applying pre-printed labels over printing and applying labels with batch information in text and code to printing and applying serialized labels. In any case, TQS fulfills the task – and many more.

The capabilities of the system go far beyond labeling. Weighing, optical inspection and even foreign body detection – each system is customized for its specific purpose. Position, amount and dimension of each module perfectly suit the product range to be processed. And all those features are fully integrated. That puts operators in the comfortable position to monitor and control every single function via one central display. The more tasks combined, the easier the process.

Transport module

Checkweigher

Mark & Verify

Sorting & rejection

TQS Core Module

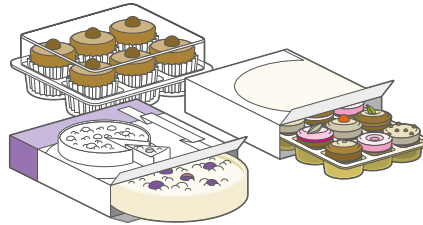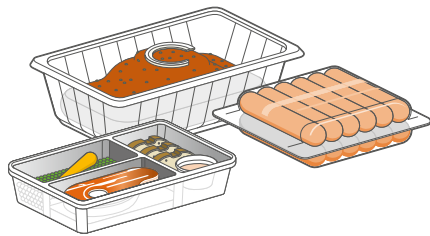Print Apply Verify

Software

Metal detector

Labeler

Features

- Labeling
- Print & apply
- Verifying
- Weighing
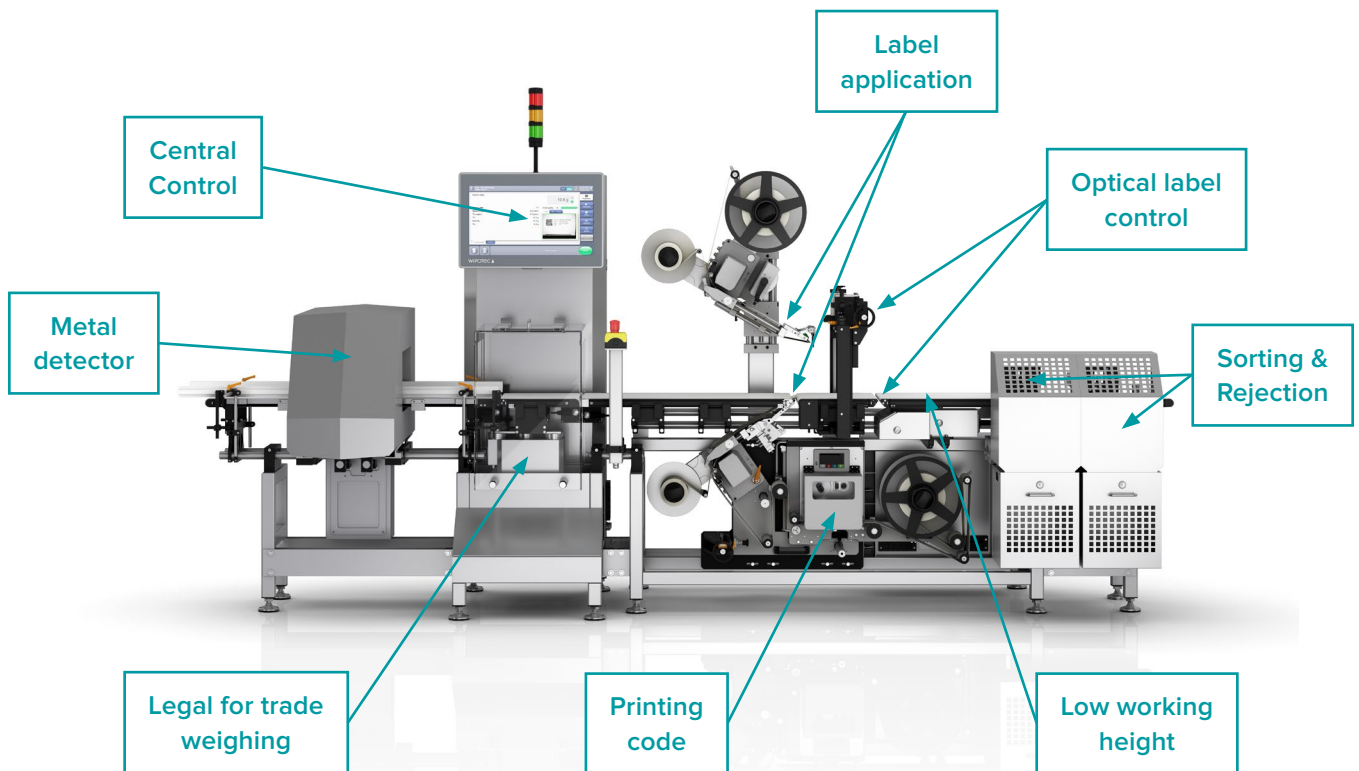- Metal Detection
- Upgradeable to full serialization

Benefits

- One system
- One user interface
- One contact
- One service partner
- Unlimited options

WIPOTEC

/**Trays** and other flat products

This popular TQS configuration weighs, labels and inspects the product for metallic foreign bodies in one process step. The top labeler applies pre-printed design labels. Below the transport belt, another label is printed with information like a batch number and best before date – in human readable text and machine-readable 2D code.
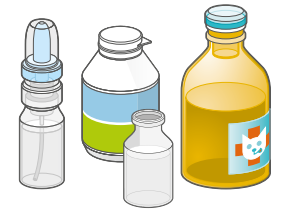
The system then verifies that both labels are correct and applied accurately. Optical control is performed with the cameras, which receive the information about the specified content directly from the system. Therefore, they do not need to be taught separately.

Label application

Central Control

Optical label control

Metal detector

Sorting & Rejection

Legal for trade weighing

Printing code

Low working height

While food and cosmetics are usually marked with batch and expiration dates, the focus for pharmaceuticals is on serialization at the individual product level. In both cases, the marking requires text and code. While pre-printed 1D barcodes are still standard in the FMCG sector, there is a strong trend towards 2D codes here as well.

These are on their way to replacing the classic register code because they offer enormous advantages for manufacturers, retailers and consumers. And since they contain information like expiry date and batch number, they cannot be printed in the packaging design in advance.
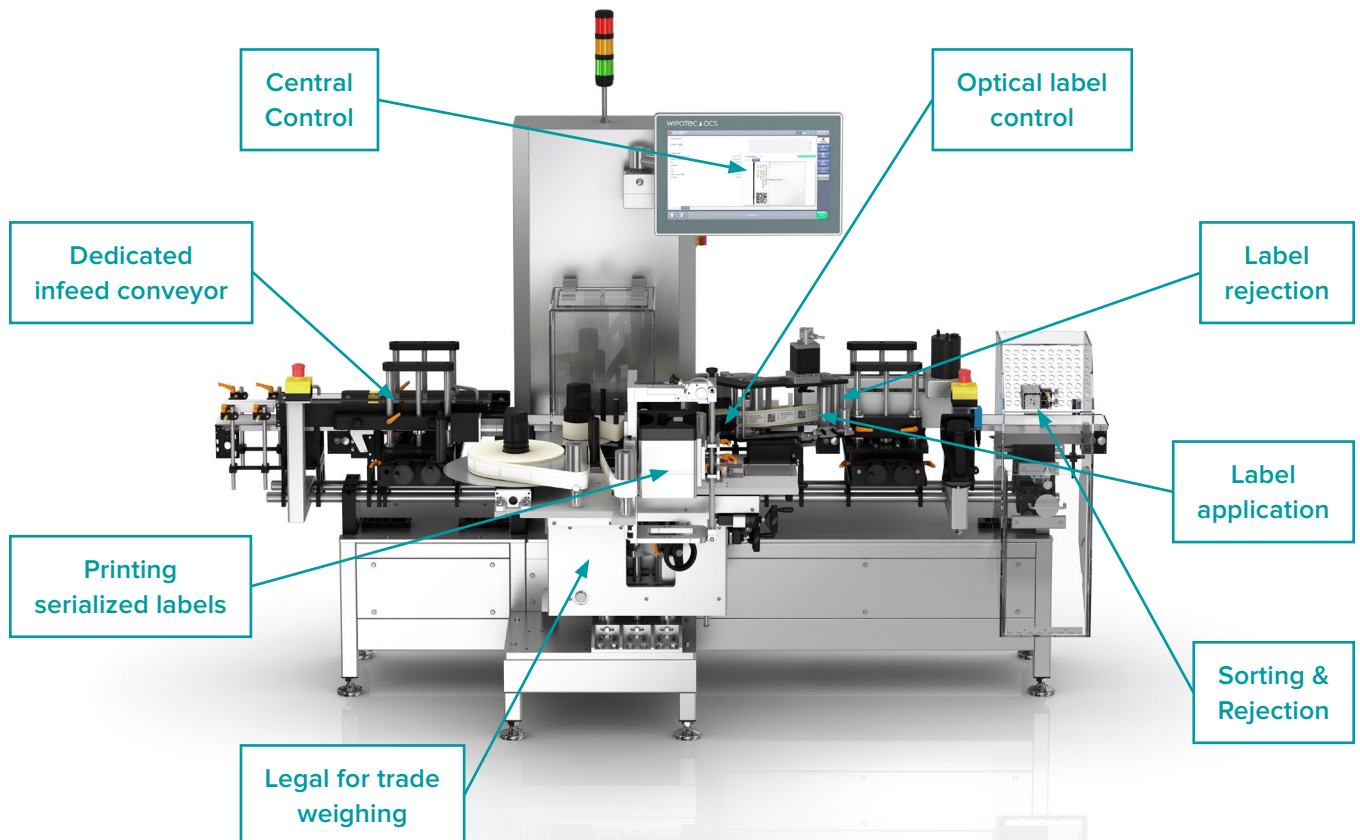
/ **Bottles**, cans and jars

Another key module of this system is wrap-around labeling. It is in use for all kinds of upright transported packaging types. Cylindric and square – one system can process both. The hardware changeover from one format to the other is performed tool-free in just a few simple steps. And because all modules are united under one control, the software changeover is even easier. Selecting a new article will automatically align printer, camera, labeler and checkweigher.

The scope of functions adapts to the needs of the application. Therefore, this system comes with a "bad label rejection" module. It checks the printed labels before it applies them to the product. Based on the gathered information, it is able to sort out labels with faulty or incorrect designs. This minimizes manual rework and the disposal of good products due to wrong labeling.

Production and packaging processes are complex. For this reason, many producers apply helper codes for mix-up control, warehousing or aggregation. Upon this requirement, the system will be equipped with an additional mark and verify module to print on the cap or bottom of the product. Of course, every additional module also is fully integrated in the central control.
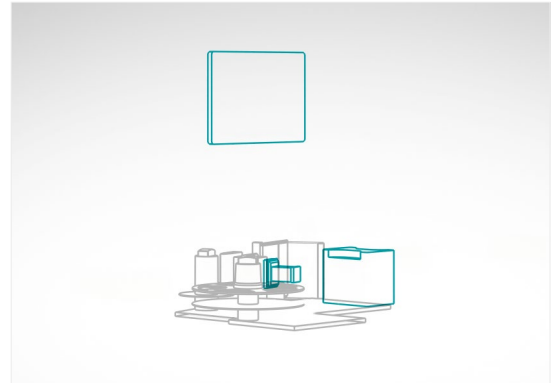
Central Control

Optical label control

Dedicated infeed conveyor

Label rejection

Printing serialized labels

Label application

Sorting & Rejection

Legal for trade weighing

/**System** integration

In contrast to the common approach of installing independent components, a TQS integration kit comes as an aligned unit. The modular design makes it possible to dispense with all transport and handling systems and still have all remaining functions under one central control.

   Typically, these kits are in use to mark labels and verify the print. With the integrated layout manager, the user decides whether to print text, code or both. Applications range from bottle labelers to case packers. ▲
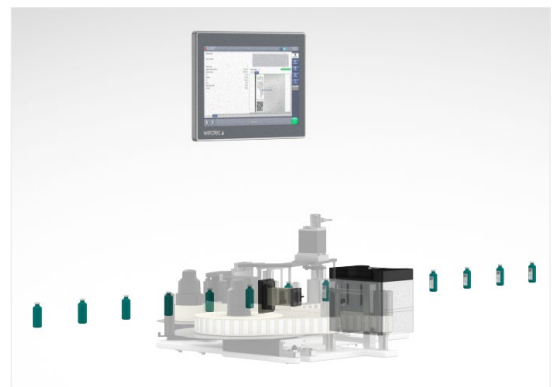

Integrated and aligned: printer, camera, control

"A system consists of different components with different capabilities, which are considered as a combined unit due to certain ordered relationships between them."

Marking and verifying labels for shipping or aggregation

Serializing labels for Track and Trace

WIPOTEC